

hydrogen, lower alkyl, lower fluoroalkyl, O-lower alkyl, lower alkenyl, lower fluoroalkenyl, O-lower alkenyl, O-lower acyl, O-aromatic acyl, lower cycloalkyl with the proviso that R^1 and R^2 cannot both be an alkenyl group, or taken together with the carbon to which they are bonded, form a C_3 - C_8 cyclocarbon ring; R^3 is lower alkyl, lower alkenyl, lower fluoroalkyl, lower fluoroalkenyl, O-lower alkyl, O-lower alkenyl, O-lower acyl, O-aromatic acyl or lower cycloalkyl; X^1 is hydrogen or hydroxyl, or, taken with R^3 , constitutes a bond when R^3 is an alkenyl group, and X^2 is hydrogen or hydroxyl, or, taken with R^1 or R^2 , constitutes a double bond.

59. (Previously Presented) A method in accordance with claim 56 wherein the active vitamin D is 1α -hydroxyvitamin D_2 or $1\alpha,24$ -dihydroxyvitamin D_2 .

60. (Previously Presented) A method in accordance with claim 56 wherein the active vitamin D is 1α -hydroxyvitamin D_4 ; $1\alpha,25$ -dihydroxyvitamin D_2 ; $1\alpha,24,25$ -trihydroxyvitamin D_2 ; $1\alpha,25$ -dihydroxyvitamin D_4 ; $1\alpha,24,25$ -trihydroxyvitamin D_4 ; 24 -hydroxyvitamin D_2 ; or 24 -hydroxyvitamin D_4 .

61. (Previously Presented) The method of claim 56 wherein the active vitamin D lacks a hydrocarbon moiety at the C-24 position.

62. (Previously Presented) A method in accordance with claim 61 wherein the active vitamin D is $1\alpha,25$ -dihydroxyvitamin D_3 or 1α -dihydroxyvitamin D_3 .

63. (Previously Presented) A method in accordance with claim 56 wherein the amount of the active vitamin D is administered to a human cancer patient, the amount of the active vitamin D effective to inhibit the hyperproliferation of the neoplastic cells.

64. (Previously Presented) The method of claim 63 wherein the amount of the vitamin D compound is administered parenterally or orally in combination with a pharmaceutically acceptable carrier.

65. (Previously Presented) A method in accordance with claim 64 wherein the amount of vitamin D compound is administered parenterally.

66. (Previously Presented) A method in accordance with claim 65 wherein the amount of vitamin D compound is administered intravenously.

67. (Previously Presented) A method of inhibiting hyperproliferation of malignant or neoplastic cells, comprising treating the cells by co-administering an antihyperproliferative amount of an active vitamin D compound and an effective amount of an agent which is an antineoplastic agent, a bone agent, an antihypercalcemic agent or combinations thereof, the cells expressing a vitamin D receptor, the antiproliferative amount of the active vitamin D compound being a dose between $10\mu\text{g}$ to about $200\mu\text{g}$ /dose administered on an episodic basis which is once per week to about once per 12 weeks.

68. (Previously Presented) A method in accordance with claim 67 wherein an amount of the active vitamin D compound and an amount of the agent are episodically co-administered to a human cancer patient, the amount of the active vitamin D effective to inhibit the hyperproliferation of the neoplastic cells.

69. (Previously Presented) A method in accordance with claim 67 wherein the agent is an antineoplastic agent.

70. (Previously Presented) A method in accordance with claim 69 wherein the antineoplastic agent is given episodically and the active vitamin D is given concurrently with the antineoplastic agent.

71. (Previously Presented) A method in accordance with claim 69 wherein the antineoplastic agent is an antimetabolite, an antimicrotubule agent, an alkylating agent, a platinum agent, an anthrocycline, a topoisomerase inhibitor, an antibiotic, any other antineoplastic agent or combinations thereof.

72. (Previously Presented) A method in accordance with claim 67 wherein the bone agent is a bisphosphonate.

73. (Previously Presented) A method in accordance with claim 67 wherein an active vitamin D compound, an antineoplastic agent and an antihypercalcemic agent are co-administered.